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THE BASIS OF AN EFFICIENT EDUCATION— CULTURE OR VOCATION

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If we are to oppose vocation to culture in this antagonistic fashion, the question seems to be simple enough and to admit of an unhesitating answer from any reasonable person. Left unqualified, it is an impossible alternative. Every man must live, and comparatively few but need to earn their livelihood. Hence there is no possibility of a choice which would leave a man without means. He must earn his living, and for this needs a vocation. Viewed thus baldly, vocation is a necessity, culture a luxury. Some years ago a teacher of the classics in a large private school was endeavoring to improve the quality of his work by subjecting his pupils to tests in sight-reading. But the headmaster of the institution observed that many of the pupils failed at first to gain satisfactory standing in these tests upon unfamiliar material; he therefore called the teacher to account and demanded his reason for his method. When the teacher replied that he taught for power, and believed that in this way only could his pupils gain power in reading the languages, the headmaster retorted sharply: "I tell you, sir, that, in a private school, teaching for power is a luxury." So, in schools of any kind, we might fairly term that training a luxury which had culture for its sole aim, and paid no heed to a probable vocation. But we must and do refuse to allow that smallest of disjunctives, *or*, to tyrannize over us. We may not and do not set vocation and culture in such unqualified opposition. Perhaps those who appear to be opponents are really nearer together than they are willing to admit.

But our topic is not altogether clear. The *basis* of an *efficient education* is to be discussed. There are certainly three words here which require careful definition. "Basis" suggests something upon which a superstructure is to be placed. Some

latitude of interpretation is quite possible there. When, in educational matters, may the basis be said to be complete? Where does the work of creating a superstructure begin? Then "efficient" qualifies education in a most embarrassing way. It itself requires explanation. An education that is efficient for what? In enabling a man to earn his living; or to make money; or to gain a proper understanding of his relations to his fellows; or to appreciate the best that the world of thought in the past and present contains for each individual? And then we find ourselves confronted with a natural doubt, which prompts us to ask who is competent to decide this question with any authority. Men travel by different ways to achieve what they term success, and, having reached their goal, naturally laud that path by which they have climbed, to the exclusion of all other paths.

After all, we have here an old question in a new form, but coming to us under changed conditions. It is a direct descendant of that much-debated question of nearly a half-century ago, "Classical versus Utilitarian Studies;" it has, moreover, a close relationship to that staple subject for discussion of more recent years, "The Merits of the Elective System in Schools and Colleges."

As regards the former question, the classicists of the present day would hardly be disposed to assume an extreme position, such as was generally occupied by their confrères of forty years ago. The absurd position of those who claimed that the study of ancient languages and of mathematics furnished the one road to culture was too apparent to withstand the mere passing of time. The justice of the position of those who urged the claims of science, of history, and of modern languages to a share of a youth's attention could not be denied; and these, in increasing amounts, have gradually found their way into school programmes, so that the old time question has assumed a new guise, and masquerades under the title "culture or vocation."

In restating the old-time controversy in a new form, the advocates of utilitarian studies have driven their opponents back to their line of secondary defense, it is true, but they have brought them new allies. Surely *now*, not mathematics and

ancient languages only, but also history and modern languages, including English, will be found ranged on the same side. Indeed, it may hardly be doubted that the champions of the sciences, of the manual arts, and of well-nigh all subjects supposed to look more directly to a vocation in life, would challenge any definition of culture which did not concede some meager portion to their subjects. Though so small as perhaps to defy measuring, it might, and probably would, be claimed. The question today is not quite as stated—we may not fairly place culture and vocation so utterly in opposition, nor may we argue the question in its old-time form. The tendency of the times and the history of events have settled that. No system of education is worthy of the name which fails to include the culture-element; and, conversely, the culture-element should be found—necessarily in varying proportions—in every system of education, even in one which aims to train directly for a vocation.

But our topic, if not followed literally, is suggestive. It offers these as important questions: What sort of culture is most desirable? Is the same form desirable for all? What part may studies pursued solely for culture ends play in the education of the individual boy? These questions all admit of one answer—it depends upon the individual boy, upon his capacity, more particularly upon his opportunity, chiefly upon the length of his school-training.

The form of culture which is suited to the best development of one boy may not be as well adapted to his friend's needs. Furthermore, so far as the school is concerned, the amount of time which a boy can spend in his school course before devoting himself to earning his living must determine what part studies for culture merely may play in his educational training. The boy who must limit his school-training to the elementary school, in common with his more fortunate fellows, must learn to read, write, and spell, and to use figures quickly and accurately for simple arithmetical operations. These are simply tools for use throughout life, and, of course, cannot claim to be more. But surely the study of these in sufficient amount need not exhaust all a boy's school time up to the age when the law, in Massa-

chusetts at least, first permits a minor to set about earning his living. There should remain a number of years in which influences may be set at work for him which will be effective in adding largely to the sum-total of his happiness in after-life, and to his appreciation of his duties as a citizen. It is certainly desirable that his hand and eye be trained. Manual training, drawing, and perhaps constructive geometry should be provided for him. But for the boy thus placed I question somewhat the worth of a single year of an ancient or modern continental language. On the other hand, I should use every effort to develop in him a fondness for reading English, and ability to express himself clearly both by writing and by speaking; to give him an acquaintance with the history of America, together with some elementary knowledge of science and of civics. In all probability, the question of vocation for this boy is largely or wholly a matter of opportunity. He must do what he can find to do, what offers at the time. Any special training for a trade, if much time were devoted to it, would be of little value to him compared with what he would lose. In night schools or otherwise the youth who feels the stimulus will make his way. When he has left school behind and engaged in the work of getting a living, he will be happier personally, and socially more useful, if he has something to occupy his thoughts, something to afford him aspirations quite other than the narrow limits of a trade can offer. For example, it may so happen that he will have charge of some machine which does but a small part of some complete work—a most monotonous condition of affairs for anyone, unrelieved by any “joy of labor” which can be imagined. Minute subdivision of labor has been found by manufacturers to be most profitable, so that the workman of today cannot of himself make the whole of anything. Speaking of the manufacture of pins, which must be made from head to point by different artisans, Dr. Chapin remarks that “this may produce sharp pins, but it makes dull men, whose children will probably be duller still.” The more need, then, that the boy likely to be employed in such a way, with merely his prospective wages to compensate him for his drudgery, have some

interest aroused in him, if it be no more, during his abbreviated school course. Perhaps the easiest to arouse, and the one most permanent and profitable, would be a love for reading. He is likely to have some leisure in his life, which the saloon and its attendant joys may fill, if no other resources are within the man; while discontent with such uninteresting labor will make him and those like him the ready tools of the mischief-makers in the labor world. Compared with this man, the worker of a half-century ago was a happy and cultivated man. If he were a cobbler, he made the whole of a shoe, and could find satisfaction in his work, partly because of the variety in his employment, and partly because he had the power and knowledge to complete something. But the modern worker is hardly more than a part of a machine. If anywhere the elements of culture need to be implanted, it is in the men of this sort; and the chief opportunity lies in the last years of the elementary-school course.

Earlier I raised the question of competency. Who is competent to decide what constitutes the basis of an efficient education? We are told with truth that no teacher engaged in work upon one plane can properly meet the needs of his pupils, if he has not himself a "perspective" which includes the higher plane to which they are going, as well as the lower from which they come to him. But in our question a "perspective" is required of such vast range that the number qualified to make a decision must be small indeed. Not only a close acquaintance with elementary and secondary schools, with college, university, and professional schools, must the qualified judge possess, but he must have met and known all sorts and conditions of men, those who have started upon their life-work from all these points of vantage or disadvantage, have traced the cause of success or failure back to their training and to their studies, and discovered what part these, and what part heredity and opportunity, played in their success or failure. Hence one may but timidly venture an opinion chiefly with reference to one's own field, and leave the main question to the few who are properly qualified to pass upon it. This brings me to the secondary school, which seems now to

be the debatable ground, and represents the point of view from which I am personally compelled to consider the question.

In the elementary school, as I have said, the aim should be arouse some permanent interest in each pupil outside of the limited horizon of his probable occupation. If on the first day of a pupil's school life it could be known that he was destined to this or that occupation, it would, perhaps, be an easier task to determine what form of educational training was best suited to him in view of his coming vocation, but his course in general culture would probably suffer somewhat. This destined career, in many cases, we cannot know at the outset; but, with reasonable probability, we can tell early the approximate duration of a pupil's school life. If a pupil's chances of completing a secondary-school course are good, the elementary culture-training is relatively a matter of less importance for him. With the utmost economy of time and least waste in his preparation, he should enter the secondary school certainly one year, and perhaps two years, earlier than at present. The chief aim of the elementary school obviously should be to serve the interests of those who end their school days within its gates, to send them out as well equipped as possible for the work of life. At present it seems to me hampered in its chief work by being called upon to teach subjects which properly belong to the high school. On the other hand, pupils intending to go to college, or at least to complete the high-school course, are forced to use one or two years upon subjects which they may take up later to better advantage and with more economy of time. Relieved of these pupils, the elementary school would have more time to devote to those who deserve its best efforts.

The secondary school, by which I have in mind chiefly the high school, cannot, even as things are now, do well in four years the work allotted to it. "If the demands upon it are increased you will hardly be justified in expecting better results," someone will object. Furthermore, there comes an urgent demand that in this course the directly useful be preferred to that which may elevate and broaden, but can claim at most to serve only an indirectly useful purpose. One is tempted to ask the question, to what extent subjects taught in secondary

schools or colleges are directly useful to those who pursue them. Take manual training for instance, or mechanical drawing. These are certainly vocational in theory, and are credited with promoting accuracy and manual dexterity. No doubt, if a pupil ultimately becomes a blacksmith, a machinist, or a draughtsman, he has had vocational training and such culture as these arts will bestow. But, as usually interpreted in school curricula, manual training is not directly useful to large numbers of pupils, for the vocation or trade subsequently followed. For the larger number the training of the eye and the hand to a certain degree of accuracy is desired, not a knowledge of forging or wood-carving. But manual dexterity can be acquired in a variety of ways. Music is usually classified among the fine arts. Yet where will you find manual dexterity of a much more difficult order than skilful piano- or violin-playing exhibits? Quite aside from the moral or immoral qualities which they are supposed to develop, athletic sports and exercises afford capital training for the muscles of the body and for the eye. No one can deny, furthermore, that the clog-dancer has dexterity of his own sort. Yet these have but a narrow utility-value. The training in one does not secure power in another. Your piano-player, be he ever so skilful, cannot play the violin without more and different manual training, nor can the violin-player do better with the piano. Your clog-dancer may not swim well. Your boy trained in wood-carving needs to learn to work in iron. But all of these will have gained for themselves a certain facility or adaptability—almost a form of culture in itself—by virtue of which each is able to apply himself readily and successfully to other acts more or less nearly related. It may be said, too, that it is the object in view which makes a subject vocational. I doubt not that many of those present this morning have had a vocational use for those ultra-cultural subjects, the ancient classics. These, by themselves, offer but one special field of culture, and, though some of us think them indispensable to the curriculum which claims to be the best for general culture, they certainly need to be supplemented from several sides. For culture of one sort is of little avail outside of its related group

of subjects, and our horizon is bound to be limited in just such proportion as our culture fails to be many-sided.

For what purpose are we educated? Certainly the acquisition of money is not the sole end in view. If this were so, we should be forced to admit, either that teachers, as a class, are uneducated, or that they fail miserably of achieving the aim of their education. It may be that both assertions are true. Our topic implies that the object of our education is efficiency—the power to use our capacities with the minimum of effort and maximum of result. But we are discussing the basis only for this successful application of our powers. Can a man best fit himself for his life-work by narrowing his educational training to the shortest and most direct road, the vocational, or by making his basis as broad as opportunity allows, and then, with powers more fully developed, by attempting to master his special training for his vocation in shorter time? The headstrong eagerness of youth to get into work early, and the necessity, which is imposed upon many, of quickly becoming self-supporting, make for the quicker vocational route. But the attitude of some of our best professional schools of law and medicine, to say nothing of theology and schools of applied science, which require a long period of probationary study, the equivalent of that leading to an A.B. or B.S. degree, looks quite the other way, and would seem to show that the wider the range of study and the fuller the maturity of the student, the greater the success with which he applies himself to his professional study.

In a recent number of an educational magazine several engineers and physicians have given their testimony to the value for them of their study of Latin and Greek. They are apparently unanimous in their belief that these studies could not have been omitted from their training without serious loss. The points upon which they lay especial stress are, first, the difficulties of these languages which serve to sharpen the faculties, and, second, the aid they afford in gaining an exact meaning of scientific terms. A classical teacher gladly welcomes this favorable testimony from unexpected sources. But, in themselves, these reasons would appear scarcely sufficient to warrant the

learner in devoting years to the study of Latin and Greek. It would not be hard to prove that there are difficulties elsewhere which may serve as fairly good mental whetstones. Moreover, the argument itself is repellent. It reminds me of that remark of Mark Twain—or was it Josh Billings?—that “a certain amount of fleas is good for a dog. It keeps him from brooding on being a dog.” As for the matter of medical terms, I doubt not that the equivalent of a week’s hard study, with the help of an etymological dictionary, would give a sufficiently accurate knowledge of them. It seems to me to parallel quite well what Professor Münsterberg has said of Esperanto. About all that can be said for it is that it becomes quite simple and easy to learn, *if* you have already studied Greek, Latin, French, German, Spanish, and Italian, as well as English. It would hardly be worth while to study all of these simply as a means to finding Esperanto an easy task. But culture comes from a study of these languages, which I think no one has yet claimed for Esperanto, this machine-made invention of the polyglots. I do not think that the engineers or physicians referred to have justified their study of Latin and Greek, if they gained no more from it than the accurate comprehension of a small or large number of scientific terms.

But, after all, I have left the particular consideration of the secondary-school course for generalities. First of all I advocate the lengthening of its course to five years, and believe that the extra year may be gained by curtailing the elementary-school course for secondary or college pupils. Subjects properly belonging to the high school will yield better results if studied there, and the elementary school will be relieved by their withdrawal. As for the old-time controversy, nearly or quite all the studies then advocated now appear upon high-school programmes. It is no longer a question of introducing these: they are here. But the ever-increasing cost of modern living and the keenness of the competition for the prizes of wealth incline everyone to seize upon an advantage wherever he fancies it may be found. An early start upon studies which are useful and lead directly toward a vocation is a help which it requires the exercise of some

self-control to deny oneself. Self-preservation is an instinct, and gaining a livelihood a very essential feature of self-preservation.

Shall we admit that the point is well made? Surrendering completely, shall we give to those who advocate it full opportunity to train for vocations only, from the outset of the secondary-school course? But, even if we do this, a difficulty remains. It is agreed that we are unlike. Special aptitudes fit us for the proper performance of different tasks. It is most essential that each of us find that vocation which is best suited to his particular capacity. How and when may we discover this? Certainly there is danger that your youthful enthusiast may run off on vocational lines, which will not ultimately bring him to the goal of his hopes, and that he may find his mistake only when it is too late to rectify it. Probably most men could achieve an average sort of success in many occupations. The one needs to be searched for in which the greatest success and usefulness awaits them.

Who of us does not recall among the friends of his boyhood some promising genius in physics or even surgery, some embryo artist or architect, whom he now recognizes among the business men of the neighboring or some other city, whose career in life has proved most useful and successful, but to lie in quite a different line from that which his and our youthful imaginations pictured it? Perhaps I might be pardoned if I should cite a specific instance of a successful business man in our neighboring city, whom I knew years ago in college as an ardent frequenter of hospitals, an attendant upon accidents, a dissector of cats; one whose budding genius and prospective greatness so impressed his professors that gross weaknesses in literary lines were overlooked, that the college might not block the progress of a man whose eminence in surgical lines was already assured.

We often hear it said that the American boy of from fifteen to seventeen years of age is, in educational progress, far behind the German or French boy of the same age. This seems much like judging of a race by the relative position of the contestants at the end of the first lap rather than at the finish. Generally speaking, I doubt if Americans of thirty-five and upward are

esteemed inferior to Germans of the same age and class. Conditions differ, and what is best for German, French, or English needs may not be equally adapted to American. The pressure of living drives us to study more and more economy of time and effort. In Germany they make an early start along one line or another, and then give a most thorough and prolonged training in it. There is some danger, perhaps, that the wrong choice will be made, and that the boy who should be in the *Gymnasium* find himself in the *Realschule*. But we may be satisfied that he will be *well* trained in the one or the other. In America our aim is to give the boy more time and opportunity to discover himself. Inevitably there is some waste in the process, but in the end it is probably worth all it costs. To quote the mate in Kipling's story, we are agreed upon a few things which "every boy should larn." But after that, his freedom of choice of a definite line extending for a longer period places the American boy at eighteen some two or three years behind his German cousin. Still if he has thereby been able to find himself more surely, the greater confidence and maturity with which he devotes himself to vocational or professional work will enable him largely to make good the time-loss. Moreover he will be less likely to find that the vocation for which he has trained himself is not, after all, the one best suited to him, or the one for which circumstances or destiny intended him.

When a pupil enters the high school, the probable duration of the school-training again should exert an influence. If he is not going farther, the immediately useful in vocational lines may have relatively greater weight. If he is going to continue farther, the demands of the institution for which he is preparing himself must largely determine his school course. Now, it may be taken for granted that not much culture is derived from a subject in which a pupil has not progressed far enough to gain real power. Is the assertion rash that few of our high-school graduates secure enough culture from the so-called culture studies for this to be plainly evident? On the other hand, is the case much better in vocational lines? Are the graduates highly esteemed by those competent to pass upon their efficiency? We

often have the credit of doing our work badly, because of the quality of our product, and yet that product represents the expenditure of a vast deal of energy and effort on the part both of teachers and of pupils. We frequently hear the statement made that the large number of failures of pupils in culture studies is due to their lack of interest, and that these same pupils would display remarkable progress if trained on different lines, perhaps with a view to a vocation. I think this is open to question. "Interest," in the earlier years of school-training, is not an entirely trustworthy guide. Slow pupils are, as a rule, slow in all their studies. There is a form of interest which seeks merely amusement, entertainment, and does not beget energy in its possessor. There is also the interest which is due to a student's belief that a course will have a money-value for him, and so he chooses it in preference to another, which in itself is more attractive to him. Then there is the interest which comes from conscious power; when the student begins to feel a certain mastery due to attention and effort. This is the interest that is real and permanent; and if culture subjects are to evoke it at all, clearly they need to be taught with sufficient fulness; otherwise we cannot justify their presence in a secondary-school programme. They should occupy, then, as much of the pupil's attention as the time limits imposed upon his school education will permit. The truth or falsity of the criticism made upon classical studies, that the few who pursue them to the end of the secondary-school course really carry away but little of valuable result, has little bearing upon the question of the relative gain to the student from culture or vocational studies. For example, some of our best high schools are excellently equipped for giving instruction in mechanical drawing and manual training, and for three or four years the study of these is carried on. Yet I am told that the Massachusetts Institute of Technology will not give credit for manual training as an entrance subject, and that if boys, who have received the training in mechanical drawing in the high school, enter the course in this subject either at the Institute or in Harvard, they are excused from a portion only, usually a small portion, of the work of *one* year.

The inference might fairly be drawn that, even in the judgment of the higher institutions, so far as these subjects at least are concerned, the time of the high school student would be better employed in general-culture studies, as no power has been gained in his special vocational subject *commensurate* with the time and effort put forth—the same arraignment which culture-studies have to meet so often.

What is the reason for the assertion that the high school does its work poorly, in every line? The business men are dissatisfied, the college men make invidious comparisons with Germany, and secondary-school teachers sometimes feel more than they speak on the subject. Not long since, in the neighboring Latin school, a large number of people met to congratulate the principal upon the completion of fifty years of most successful service in that school. He commented upon the fact that fifty years ago the demands of Harvard for entrance were expressed in nineteen lines of the college catalogue, whereas today, they fill twenty pages. Yet at that time the school was in session a much longer portion of each year than it is today. In this form the statement is hardly fair to the college, but it does serve to show somewhat the changes which have come about. A dozen or more years ago the Committee of Ten and their assistants tried to improve matters for us, and certainly did so in many ways. But the result of their investigations showed that each teacher thought he could do more in his particular subject than he was doing. Still, as we wished to be conservative and to hold on firmly to that which was good, and at the same time to be progressive and secure all that was useful in the new order of things, very little consideration was paid to the student who was to be the happy beneficiary of all our thought for his welfare. We hardly remembered that he is of the same order of youth as his ancestor after all; that you cannot put much more than a quart into a quart bottle; and that, as the labeled quart sometimes hardly measures up to the pint standard, there is bound to be trouble. Just at present it is difficult to get any satisfactory training or culture in any line, because of the pressure in all lines.

A five-year course, then, is desirable for the high school. The standard and scope of work within the subjects should be improved, to the end that some real power or culture may be reasonably hoped for. We do not need to have the number of points required for college entrance increased, but rather to have greater values allowed for better work within the subjects. Take Latin, as an instance, a subject around which the preparation for the course in arts should be built. One must travel a long way before reaching the place where the greatest benefit of Latin training is received, though it certainly is waiting for the earnest student. Unfortunately most students drop the subject just as they approach that stage in their progress when they can appreciate and profit by its cultivating qualities. After the freshman year in college, Latin, if not prescribed, one might almost venture to call a vocational subject. It is certainly elected chiefly by those who have a direct use for it. The natural end, then, for the Latin study of most American youths would appear to be at the completion of the Livy and Horace of the freshman year. This point might well be reached by a still larger number than at present, while still students in the secondary-school period, and, at the same time, the good results be obtained which Latin ought to furnish. It seems to me quite possible that, with a reasonable programme in quantity, the study of Latin might be carried thus far, and we be brought a step nearer our envied German student. Moreover, if this were well done, it would go far toward refuting the contention that little power or culture is obtained by high-school graduates from that study to which they have devoted more time than to any other. The student who entered college would be free earlier to follow other lines or to continue Latin, as he chose. The student who did not go to college would have done as much work in the subject, and would carry away as much from it, as the great majority of college students. That this cannot be done without more time devoted to Latin I know full well. A possible, though from my standpoint a most unhappy, solution of the difficulty might be found in this. The present condition of the study of Greek in the high schools hardly justi-

fies its presence there. It is not worth while to enter upon the question of its value for culture or disciplinary purposes. No one can deplore more than myself, who have found my chief pleasure in teaching for the past twenty years in my Greek classics, that Greek seems to be dying gradually of inanition. Yet I cannot but feel the point well made that it is better to pursue the study of one language to the stage where some mastery over it as an instrument for culture is gained, than to travel half-way to this point in two. It seems a sacrilege to quote Homer in this connection, but I have said this "of my own free will, but with reluctant spirit." Greek as an important factor is fast disappearing from our high schools, however much we may regret the fact. It seems to me it would be better to make our training broader and deeper in one ancient and one modern language, rather than to gain a lesser degree of proficiency in two ancient and one modern, or one ancient and two modern. It would be a good thing from a cultural standpoint if a five-year programme of six periods weekly could be secured for Latin, and French or German also studied more intensively than now, while English—the writing of English, and the study of English literature—should be studied throughout the course in close connection with these languages and by itself.

Having gone so far away from my topic, perhaps you will pardon me if I go still farther away from it. One of the chief influences making for or against the effectiveness of a study in the schools lies in the constant public agitation of its value. No pupil is likely to pursue a study with any seriousness, the value of which he hears questioned at home, on the street, and, it may even be, within the school precincts. I once had an assistant in Latin—a splendid fellow—who took it into his honest head to say to his classes that he "hated Latin anyhow; supposed they did; had been conditioned upon it when he entered college." When he was shortly afterward promoted to university work, I felt that, however keen my regret at losing the presence of a genial and outspoken friend, I could easily spare him as an assistant in Latin. The pupil of the present suffers from this. Doubtless the future generation will profit by it all, when we have united upon a few educational lines which all may respect,

if they do not follow. It behooves us to agree speedily, unless we wish effective instruments to be made relatively less effective. This leads me still farther. Specialists among preparatory-school teachers are not an unmixed good. In fact, the situation is getting to be much as with the makers of pins in industrial labor. In order to get efficiency we specialize, but we are not making pins which are incapable of mental impressions, but teaching boys and girls who are. The teacher of one subject is apt to be regarded as the enemy of the teacher of another, and the point of view of the pupil who is studying both subjects is not so well appreciated as it might be. A secondary-school teacher might easily equip himself so as to teach both Latin and French, or Latin and German, and without slighting either, improve the work in both. Max Müller, speaking of teaching etymology by comparing words of three languages, asserts that "an hour a week so spent would save ten hours in teaching French and Latin." I advocate then a training in language in the secondary school which shall be complete enough to render it a cultural activity, based on not more than three languages, one of which for the course in arts must be Latin. Moreover, I think that a broader view for the teacher, a larger culture-return for the student, as well as a fairer consideration of the pupil's view-point, can be secured if each teacher busies himself with two subjects.

The danger there is in choosing a boy's vocation too early in his educational career, and in making his course bend at once and finally to this choice, can hardly be too strongly emphasized. There are many children in our high schools today who let immediate ease or pleasure decide for them the question of going to college. There are many, too, who change from one course to another with no definite purpose, influenced by momentary considerations. When the future vocation is surely known, it is perhaps desirable that its influence should shape the earlier course somewhat. But there is danger of error if selection is made before the powers have been sufficiently tried in many directions, or one's limitations reached in any.

But suppose we train at once for a vocation, and men become skilled in various arts, trades, and professions earlier than here-

tofore. Will the result always be satisfactory? A few weeks since I heard one of the foremost preachers of Greater Boston warning those who should have charge of filling his pulpit in the event of his leaving it, that it would require a man of vastly wider range of knowledge and attainments to fill it or any pulpit adequately today than had been true a quarter of a century ago. Even the vocation of a clergyman demands more than a strictly theological training based upon the so-called culture studies of a previous generation.

To draw a parallel from athletic sports, there also it is difficult to secure all-around development. The man or boy who is strong, or active, or swift, in one particular part or function of the body, has a tendency to cultivate that, to the neglect, loss, and sometimes to the positive injury of other parts or functions. The aim of proper physical training is to secure superior effectiveness in one part by adequate co-operation with other parts. The man who prepares for a boat-race does not give all his training-time to rowing. He runs, lifts weights, exercises with various machines, tries to develop a strong and well-balanced bodily organization, as well as to handle an oar deftly and effectively; or rather he does these things that he may handle an oar to the best advantage.

I believe that culture can be obtained from the proper study of many different subjects; that there is no real opposition between culture and vocation, but that the study of a vocation begun too early is likely to interfere with the gaining of culture, and result in loss to the individual; that the elementary school should do all it can to stimulate a fondness for something outside the vocation in those who receive least school training; that a greater progress and efficiency would be gained by limiting the number of subjects of the same order in secondary schools, and carrying them farther, with their interrelations more clearly marked; that the high-school course affords an opportunity for self-discovery which will enable the future college or university student to find his natural bent or aptitude with more confidence of right determination than can be made earlier; that it is everyone's duty to secure as broad culture as his opportunities will allow.